

# Comparisons of Job Characteristics

**Focus Occupation:** [Cartographers and Photogrammetrists \(17-1021\)](#)

**Associated Occupation:** [Surveying and Mapping Technicians \(17-3031\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 88

**Focus Occupation:** Cartographers and Photogrammetrists (17-1021)  
**Associated Occupation:** Surveying and Mapping Technicians (17-3031)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	9.2	15.0	9.9	<<	Extensive education and/or training may be required
Geography	3.9	14.5	19.1	>>	Current knowledge level is likely more than sufficient
Computers and Electronics	8.4	13.4	14.8	>	Current knowledge level is likely sufficient
Design	5.2	11.8	9.5	<	Expanded education and/or training may be required
Engineering and Technology	5.7	10.3	5.4	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 85

**Focus Occupation:** Cartographers and Photogrammetrists (17-1021)  
**Associated Occupation:** Surveying and Mapping Technicians (17-3031)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	6.2	11.6	7.9	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 95

**Focus Occupation: Cartographers and Photogrammetrists (17-1021)**  
**Associated Occupation: Surveying and Mapping Technicians (17-3031)**

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Near Vision	11.1	13.2	12.8	0	Current ability level may be sufficient
Information Ordering	9.9	11.5	10.7	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	11.2	8.1	<<	Extensive improvement in abilities may be required
Finger Dexterity	7.6	10.2	9.3	0	Current ability level may be sufficient
Far Vision	7.8	10.0	9.3	0	Current ability level may be sufficient
Flexibility of Closure	7.8	9.8	10.1	0	Current ability level may be sufficient
Number Facility	6.3	9.2	7.9	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	8.6	7.7	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation: 90**

**Focus Occupation: Cartographers and Photogrammetrists (17-1021)**  
**Associated Occupation: Surveying and Mapping Technicians (17-3031)**

Work Activities	Exclusivity of Activity
Analyze spatial data	87
Analyze technical data, designs, or preliminary specifications	47
Draw maps or charts	69
Draw prototypes, plans, or maps to scale	57
Interpret aerial photographs	69
Read maps	42
Read technical drawings	7
Research property records	77
Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use drafting or mechanical drawing techniques	50
Use geographical information system (GIS) software	72
Use spreadsheet software	18

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation: 80**

**Focus Occupation: Cartographers and Photogrammetrists (17-1021)**  
**Associated Occupation: Surveying and Mapping Technicians (17-3031)**

<b>Tools and Technologies</b>	<b>Exclusivity</b>
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Drafting supplies	9
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Measuring and layout tools	3
Network applications software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.